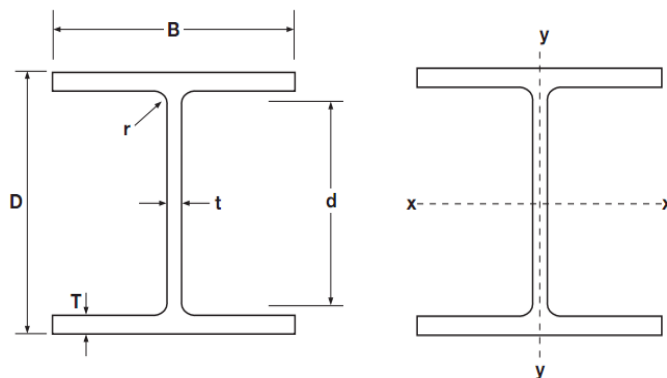


# RAINHAM STEEL

Phone: 01708 522311 Fax: 01708 559024 Email: sales@rainhamsteel.co.uk

## Universal Columns

Material to EN 10025-2:2003  
Dimensions and properties to BS4-1:1993



Designation Serial Size	Mass per metre kg/m	Depth of Section D mm	Width of Section B mm	Thickness of Web t mm	Thickness of Flange T mm	Root Radius r mm	Depth between fillets d mm	Ratios for Local Buckling		Second Moment of Area	
								Flange B/2T	Web d/t	Axis x-x cm <sup>4</sup>	Axis y-y cm <sup>4</sup>
356x406x634	633.9	474.6	424.0	47.6	77.0	15.2	290.2	2.75	6.10	274800	98130
356x406x551	551.0	455.6	418.5	42.1	67.5	15.2	290.2	3.10	6.89	226900	82670
356x406x467	467.0	436.6	412.2	35.8	58.0	15.2	290.2	3.55	8.11	183000	67830
356x406x393	393.0	419.0	407.0	30.6	49.2	15.2	290.2	4.14	9.48	146600	55370
356x406x340	339.9	406.4	403.0	26.6	42.9	15.2	290.2	4.70	10.9	122500	46850
356x406x287	287.1	393.6	399.0	22.6	36.5	15.2	290.2	5.47	12.8	99880	38680
356x406x235	235.1	381.0	394.8	18.4	30.2	15.2	290.2	6.54	15.8	79080	30990
356x368x202	201.9	374.6	374.7	16.5	27.0	15.2	290.2	6.94	17.6	66260	23690
356x368x177	177.0	368.2	372.6	14.4	23.8	15.2	290.2	7.83	20.2	57120	20530
356x368x153	152.9	362.0	370.5	12.3	20.7	15.2	290.2	8.95	23.6	48590	17550
356x368x129	129.0	355.6	368.6	10.4	17.5	15.2	290.2	10.5	27.9	40250	14610
305x305x283	282.9	365.3	322.2	26.8	44.1	15.2	246.7	3.65	9.21	78870	24630
305x305x240	240.0	352.5	318.4	23.0	37.7	15.2	246.7	4.22	10.7	64200	20310
305x305x198	198.1	339.9	314.5	19.1	31.4	15.2	246.7	5.01	12.9	50900	16300
305x305x158	158.1	327.1	311.2	15.8	25.0	15.2	246.7	6.22	15.6	38750	12570
305x305x137	136.9	320.5	309.2	13.8	21.7	15.2	246.7	7.12	17.9	32810	10700
305x305x118	117.9	314.5	307.4	12.0	18.7	15.2	246.7	8.22	20.6	27670	9059
305x305x97	96.9	307.9	305.3	9.9	15.4	15.2	246.7	9.91	24.9	22250	7308
254x254x167	167.1	289.1	265.2	19.2	31.7	12.7	200.3	4.18	10.4	30000	9870
254x254x132	132.0	276.3	261.3	15.3	25.3	12.7	200.3	5.16	13.1	22530	7531
254x254x107	107.1	266.7	258.8	12.8	20.5	12.7	200.3	6.31	15.6	17510	5928
254x254x89	88.9	260.3	256.3	10.3	17.3	12.7	200.3	7.41	19.4	14270	4857
254x254x73	73.1	254.1	254.6	8.6	14.2	12.7	200.3	8.96	23.3	11410	3908
203x203x86	86.1	222.2	209.1	12.7	20.5	10.2	160.8	5.10	12.7	9449	3127
203x203x71	71.0	215.8	206.4	10.0	17.3	10.2	160.8	5.97	16.1	7618	2537
203x203x60	60.0	209.6	205.8	9.4	14.2	10.2	160.8	7.25	17.1	6125	2065
203x203x52	52.0	206.2	204.3	7.9	12.5	10.2	160.8	8.17	20.4	5259	1778
203x203x46	46.1	203.2	203.6	7.2	11.0	10.2	160.8	9.25	22.3	4568	1548
152x152x37	37.0	161.8	154.4	8.0	11.5	7.6	123.6	6.71	15.5	2210	706
152x152x30	30.0	157.6	152.9	6.5	9.4	7.6	123.6	8.13	19.0	1748	560
152x152x23	23.0	152.4	152.2	5.8	6.8	7.6	123.6	11.2	21.3	1250	400

Designation		Area of section cm <sup>2</sup>	Radius of Gyration		Elastic Modulus		Plastic Modulus		Buckling Parameter u	Torsional Index x	Warping Constant H dm <sup>6</sup>	Torsional Constant J cm <sup>4</sup>
Serial	Size		Axis x-x cm	Axis y-y cm	Axis x-x cm <sup>3</sup>	Axis y-y cm <sup>3</sup>	Axis x-x cm <sup>3</sup>	Axis y-y cm <sup>3</sup>				
356x406x634	633.9	808	18.4	11.0	11580	4629	14240	7108	0.843	5.46	38.8	13720
356x406x551	551.0	702	18.0	10.9	9962	3951	12080	6058	0.841	6.05	31.1	9240
356x406x467	467.0	595	17.5	10.7	8383	3291	10000	5034	0.839	6.86	24.3	5809
356x406x393	393.0	501	17.1	10.5	6998	2721	8222	4154	0.837	7.86	18.9	3545
356x406x340	339.9	433	16.8	10.4	6031	2325	6999	3544	0.836	8.85	15.5	2343
356x406x287	287.1	366	16.5	10.3	5075	1939	5812	2949	0.835	10.2	12.3	1441
356x406x235	235.1	299	16.3	10.2	4151	1570	4687	2383	0.834	12.1	9.54	812
356x368x202	201.9	257	16.1	9.60	3538	1264	3972	1920	0.844	13.4	7.16	558
356x368x177	177.0	226	15.9	9.54	3103	1102	3455	1671	0.844	15.0	6.09	381
356x368x153	152.9	195	15.8	9.49	2684	948	2965	1435	0.844	17.0	5.11	251
356x368x129	129.0	164	15.6	9.43	2264	793	2479	1199	0.844	19.9	4.18	153
305x305x283	282.9	360	14.8	8.27	4318	1529	5105	2342	0.855	7.65	6.35	2034
305x305x240	240.0	306	14.5	8.15	3643	1276	4247	1951	0.854	8.74	5.03	1271
305x305x198	198.1	252	14.2	8.04	2995	1037	3440	1581	0.854	10.2	3.88	734
305x305x158	158.1	201	13.9	7.90	2369	808	2680	1230	0.851	12.5	2.87	378
305x305x137	136.9	174	13.7	7.83	2048	692	2297	1053	0.851	14.2	2.39	249
305x305x118	117.9	150	13.6	7.77	1760	589	1958	895	0.850	16.2	1.98	161
305x305x97	96.9	123	13.4	7.69	1445	479	1592	726	0.850	19.3	1.56	91.2
254x254x167	167.1	213	11.9	6.81	2075	744	2424	1137	0.851	8.49	1.63	626
254x254x132	132.0	168	11.6	6.69	1631	576	1869	878	0.850	10.3	1.19	319
254x254x107	107.1	136	11.3	6.59	1313	458	1484	697	0.848	12.4	0.898	172
254x254x89	88.9	113	11.2	6.55	1096	379	1224	575	0.850	14.5	0.717	102
254x254x73	73.1	93.1	11.1	6.48	898	307	992	465	0.849	17.3	0.562	57.6
203x203x86	86.1	110	9.28	5.34	850	299	977	456	0.850	10.2	0.318	137
203x203x71	71.0	90.4	9.18	5.30	706	246	799	374	0.853	11.9	0.250	80.2
203x203x60	60.0	76.4	8.96	5.20	584	201	656	305	0.846	14.1	0.197	47.2
203x203x52	52.0	66.3	8.91	5.18	510	174	567	264	0.848	15.8	0.167	31.8
203x203x46	46.1	58.7	8.82	5.13	450	152	497	231	0.847	17.7	0.143	22.2
152x152x37	37.0	47.1	6.85	3.87	273	91.5	309	140	0.848	13.3	0.0399	19.2
152x152x30	30.0	38.3	6.76	3.83	222	73.3	248	112	0.849	16.0	0.0308	10.5
152x152x23	23.0	29.2	6.54	3.70	164	52.6	182	80.2	0.840	20.7	0.0218	4.63